
Please read before using this equipment.

RadioShack

## FEATURES

Your RadioShack CT-502 Flip-Style Handheld Cellular Telephone with Silent Vibrating Alert is a state-of-the-art personal cellular telephone. It has all of these features:

Special Messaging Service Features - the phone is preprogrammed to work with special (subscription-only) messaging services offered by many cellular carriers, including calling line ID, voice mail notification, and short (alphanumeric) messages.

Vibration and Silent Alert Modes - let you set the phone to vibrate gently (instead of ring) when it receives a call, or make no sound or movement at all, to avoid disturbing others.

Nine Different Ringer Styles - let you set the phone's ringer to help you distinguish your phone's ring from that of another phone.

Easy-to-Read Seven-Character Display - bright red LED characters let you see essential call information in almost any lighting condition.

Call Timers - let you keep track of the individual and cumulative call time (air-time), and includes a timer that you can reset as you wish (so you can track monthly airtime, for example).

Speed/Memory Dialing - lets you store up to 50 phone numbers (of up to 32 digits each) and names (of up to 14 characters each) in memory and dial any of them by pressing one or two buttons.

Memory Scrolling - lets you rapidly search the memory locations for a number you stored.
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Last Number Redial - lets you quickly review and redial any of the last 10 numbers that you called.

Scratchpad Memory - lets you temporarily store a number (even during a call), then easily dial it.

Security Features - to prevent unauthorized phone use, you can lock the phone (so it cannot be used at all) or set up to five different levels of service restrictions (so only local calls can be made, for example).

Multiple Key Answer - lets you set the phone so pressing one of several keys answers a call.

Ample Talk and Standby Time - the supplied battery provides about 85 minutes of talk time or 24 hours of standby time, when fully charged.

Battery and Cellular Signal Strength Meters - easy-toread graduated bar graphs let you quickly check the battery power remaining or the current cellular signal strength.

Automatic Answer - lets you set the phone to answer automatically after two rings (if you are using optional handsfree equipment, for example).

Two Phone Number Capability - lets you use this one phone with two different cellular services, with a different phone number from each.

Handsfree Feature - the phone is preprogrammed to work with most optional handsfree equipment.

We recommend you record your phone's Electronic Serial Number (ESN) here. The number is on the back of the handset under the battery.

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## A LOOK AT YOUR PHONE



1. Retractable Antenna

Extend during a call for optimum performance.
2. Earpiece
3. Status Indicators
(See "Reading the Status Indicators" on Page 7.)
4. Alphanumeric Display (Seven-Character LED)

Displays the phone number, name, memory location number, or message.
5. Alphanumeric Keypad

Enters call information or programs functions.
6. Function Keys
(RCL) - Recalls numbers stored in memory.
(CLR - Removes characters or clears functions.
END - Ends a call or exits the functions menu.
SND - Places or answers calls.
(xem - Accesses the memory or functions menu.
(FCN) - Selects functions.
(sTo) - Stores to memory; turns on functions.
(Pwr) - Turns the phone on and off.
7. Flip Cover
8. Volume Controls

Press to increase or decrease the ringer or earpiece (during a call) volume levels.


## READING THE STATUS INDICATORS

## Power/Lock Indicator

- Flashes slowly when the phone is on and in service.

- Lights steadily when the phone is locked.


## InUse Indicator

Flashes when a call is in progress.


## NoSvc (No Service) Indicator

Flashes or lights steadily if the phone is beyond the range of the cellular service area, meaning calls cannot be made or received. See "Signal Strength/Service Area" on Page 14.

## Roam Indicator

Flashes or lights steadily if the phone is accessing a service area outside of your home system (roaming). See "Roaming" on Page 59.

## READING THE DISPLAY



Your phone's display provides a full range of messages and indicators to assist you with the phone's operation. Since many of these messages contain more characters than your phone can display at one time, the phone displays most messages across more than one display. For example, the phone displays Signal then (within about 1 second) Mtr On to indicate that the signal meter display feature is turned on.

Note: When referring to a displayed message, this manual includes the entire message (such as Signal Mtron).

For a complete listing of display messages and indicators, see "Display Message Glossary" on Page 73.


## USING THE BATTERY

Warning: A detached battery could cause property damage, injury, or burns if a metal object (such as a pen spring, beaded chain, or piece of jewelry) contacts the battery's terminals and causes a short circuit. Be careful when placing a charged battery inside a coat pocket, purse, or other container that might contain metal objects.

Caution: Nickel metal-hydride (NiMH) batteries must be recycled or disposed of properly. They must not be disposed of in municipal waste.

## INSTALLING THE BATTERY



1. Place the battery flat against the back of the phone and align the top of the battery below the raised arrows.
2. Slide the battery toward the top of the phone until it snaps into place.


To remove the battery, be sure the phone is turned off, then press the latch at the top of the battery and slide the battery toward the bottom of the phone until it stops. Then lift the battery off the phone.

Note: If you have an extra charged battery and the currently installed battery becomes low during a call, you can change the battery without ending the call or losing the connection. See "Replacing a Battery During a Call" on Page 12.

## CHARGING THE BATTERY

The nickel metal-hydride (NiMH) battery supplied with your telephone is shipped in a discharged state to extend the battery's life. It must be fully charged before you can use your phone.

We recommend that you charge a new battery overnight, but no longer than 24 hours, using the AC charger supplied with your phone. Recharging time for the supplied battery is about 3 hours, although the time varies based on the amount of charge left in the battery. For the recharging time of any other battery type, see the instructions provided with that battery.

Follow these steps to charge the supplied (or any approved) battery using the charger supplied with your phone.

1. Install the battery on the phone.
2. Insert the charger's flat plug into the charging jack on the bottom of the phone.

Note: The plug fits into the jack only one way. If you have difficulty inserting the plug, turn it over and try again. Do not force it!
3. Plug the charger's power cord into a standard AC outlet.

## Notes:

- You can use the phone while it is charging, but charging takes longer.
- For the fastest charging, be sure the phone is turned off during charging, if you are not expecting a call.
- If the phone is on when you connect the charger, the phone beeps once and the keypad backlight remains on until you disconnect the charger.

4. When the battery is fully charged, disconnect the charger from the AC outlet. Then press in the clips on the sides of the plug and pull it away from the phone to disconnect the charger.

## CHECKING BATTERY POWER

When battery power becomes low, the phone displays Low Bat and sounds a warning tone every few seconds. When power becomes too low for the phone to operate, it automatically turns off. Recharge the battery as soon as possible.

To check the battery's charge level at any time, press (FCN ( $\sigma+14$. The battery strength meter appears on the display for about 5 seconds. The more bars that appear on the meter, the higher the battery's current charge level. If few or no bars appear, the battery's power is low.


## Notes:

- If you press $\sqrt{\text { FCN }} \sqrt{\circ H+14}$ while the phone is charging, the phone flashes Chrging Battery for about 5 seconds instead of the battery strength meter.

Note: Rechargeable batteries last longer and perform better if occasionally allowed to fully discharge. You can do this by leaving the phone on until it automatically turns off or you can use the battery discharge feature of any approved accessory available for your phone. Do not try to discharge the battery by any other means.

## REPLACING A BATTERY DURING A CALL

If you have an extra charged battery and the currently installed battery becomes low during a call, follow these steps to change the battery without ending the call or losing the connection.

1. Tell the other party on the line what you plan to do (tell them, for example, that they will hear some noise as you remove the battery and you will call back if for any reason you lose the connection).
2. Remove the battery, and within 3 seconds, install the fresh battery. Your call is still on the line.
Note: If you do not complete Step 2 within 3 seconds, the call disconnects.


## IMPORTANT BATTERY TIPS

- Use only the supplied charger and use only batteries designed for this phone.
- You can purchase additional standard or extended capacity batteries through your local RadioShack store.
- When you are not using the charger, disconnect it from power. Do not leave the battery connected to the charger for more than 24 hours, since overcharging could shorten the battery's life.
- When the battery is not in use, store it uncharged in a cool and dark place.
- The battery is a sealed unit with no serviceable parts. Do not try to open the case.
- For the best results, be sure the battery is at or near room temperature when you charge it.
- A battery can be charged and discharged hundreds of times, but it eventually wears out. When the operating time (talk time and standby time) is noticeably shorter than normal, get a new battery and recycle or properly dispose of the old one.
- Do not dispose of batteries in a fire.
- Never use any charger or battery that is damaged or worn out.


## BASIC OPERATION

## TURNING THE PHONE ON/OFF

To turn on the phone, flip down the cover then press (Pwn). The phone performs a short self test and sounds a tone or vibrates (see "Changing the Alert Type" on Page 29), then the signal strength meter appears (see "Signal Strength/Service Area") and the keypad backlight turns on for about 16 seconds. The phone is ready to use when the green power/lock indicator begins to flash.

Notes: The keypad backlight turns on for about 16 seconds every time you press a key, then it turns off and the display goes blank to conserve battery power.

To turn off the phone, press again. The display goes blank and the green on/lock indicator turns off.

## SIGNAL STRENGTH/SERVICE AREA

Each time you turn on the phone, clear the display, or make a call, the signal strength meter appears on the display to indicate the strength of the cellular signal currently being received. The more bars that appear on the meter, the stronger the signal.


## Notes:

- If few or no bars appear (meaning the signal strength is weak) and you want to make or receive a call, move the phone to a different location so the signal strength increases.

- You can disable the signal strength meter so it does not appear. See "Turning the Signal Strength Meter Off/On" on Page 26.

If the NoSvc indicator (above the display) turns on, the phone is outside the cellular service area and you cannot make or receive calls until you reach an area with service your phone can use.

## MAKING A CALL

1. Extend the antenna, flip open the cover, and be sure the phone is on (the green power/lock indicator is flashing).
2. Press the number keys to enter the phone number you want to dial (including the area code, if necessary). The numbers appear on the display as you press them.
Notes:

- If you make a mistake, repeatedly press (CLR to delete one digit at a time, or hold down © CLR to delete all digits.
- The phone can display up to 7 characters at once. If you enter (or display a message containing) more than 7 characters, the characters automatically scroll off the left side of the display. Press ( ${ }^{\text {RCL }}$ at any time to recall the overflow characters. See "A Number Longer than Seven Digits" on Page 21.

3. Press SND to dial the phone number. The InUse indicator flashes and the phone briefly displays Dialing then the number called, then the signal strength meter.
4. To end the call, press END.

Note: Closing the cover does not end or disconnect a call.

## System Busy Message

In addition to the normal busy signal you hear when a number you call is busy, your phone sounds tones and displays a message to indicate other situations when it cannot complete a call.

| Tone | Display Shows | Description |
| :---: | :---: | :--- |
| Fast Busy | SND to <br> Redial | The cellular system is <br> busy. |
| High/low | SND to <br> Redial | The cellular system <br> could not complete the <br> call. |

When either of these conditions occur, you can press SND again to redial the number immediately (see "Using Automatic Redial" on Page 20), or press END then dial the number again.

## ANSWERING A CALL

When the phone receives an incoming call, it rings or vibrates (depending on the alert setting - see "Changing the Alert Type" on Page 29) and Call flashes on the display. To answer the call, press SND. To end the call, press END.

## Notes:

- Your phone can receive calls even if the antenna is not extended. For optimum performance or if the signal strength becomes weak, however, extend the antenna.

- To set your phone so you can answer a call by pressing keys other than just SND, see "Using Multiple Key Answer" on Page 32.
- If you subscribe to calling line ID service through your cellular carrier, you can view the calling party's phone number on the phone's display. See "Viewing/Recalling Messages" on Page 51.
- If your phone receives a call but the signal strength is too weak to support it, Call appears as usual, but you hear the phone sound a series of beeps (rather than ringing or vibrating). The caller hears the standard "not in service" message. If this happens, press (CLR to clear Call from the display.


## Missed Call Message

If your phone is on and receives a call, but you do not answer it, Call appears on the display for about 15 seconds after the calling party hangs up. The next time you press any key (except (CLR), END, or (PWR), Call reappears for about 15 seconds to notify you that you missed a call.

To clear Call from the display, press (CLR or END.

## ADJUSTING THE VOLUME

## Adjusting the Earpiece Volume

To increase or decrease the earpiece volume during a call, repeatedly press the top (increase) or bottom (decrease) volume button on the side of the phone. Each time you press the button, the volume meter appears on the display for about 8 seconds. The more bars that appear on the meter, the higher the earpiece volume.


## Adjusting the Ringer Volume

To increase or decrease the phone's ringer volume, when the phone is not in use, press (FCN then repeatedly press the top (increase) or bottom (decrease) volume button on the side of the phone. Each time you press the button, the phone rings once and displays the volume meter for about 8 seconds. The more bars that appear on the meter, the higher the ringer volume sounds.

## Using Mute

To turn off the phone's microphone during a call so the other party on the phone cannot hear you (so you can talk privately with someone else in the room, for example), press (FCN nNo6. Mute appears.

To turn the microphone on again, press FCN ano6 again so Mute disappears.

Hint: To help you remember which key to use, note that " M " (for mute) appears on the ano6 key.

Note: Pressing END to end a call also turns the microphone back on.

## MAKING EMERGENCY CALLS

Your phone is preprogrammed to let you dial your local emergency number (such as 911) at the press of a single button, even if the phone is locked (see "Locking Your Phone" on Page 45). Before you can use this feature, however, you must first program the emergency number you want to use in memory location 01 of your phone. See "Storing Speed Dial Numbers" on Page 36.

To place an emergency call once you have stored the emergency number, simply hold down 1 for about 1 second. Emergcy appears and the phone dials the emergency number.

## Important Notes:

- If one-touch dialing is turned off (see "Turning OneTouch Dialing Off/On" on Page 32), you cannot make emergency calls using the $\qquad$ 1 key.
- When you make an emergency call, give your name and cellular phone number, as well as the location of the incident. Remember that your phone might be the only means of communication at the accident scene. Do not end the call until you are advised you may do so.
- Emergcy does not appear if the emergency display function is turned off (see "Turning the Emergency Display Off/On" on Page 33).


## REDIALING NUMBERS

## Using Last Ten Number Redial

Your phone constantly stores the last 10 phone numbers you called. To recall and redial one of those 10 numbers, follow these steps.
 recent number called flash on the display.
2. To scroll through the last 10 numbers called ( $\mathbf{L} \mathbf{0}^{\prime}, \mathbf{L} 1^{\prime}$, and so on), repeatedly press \# \# to scroll forward or $\Psi^{*}$ to scroll backward.
3. To redial a displayed number, press SNL.

To exit without redialing a number and clear the display, hold down (CLR for about 1 second.

## Using Automatic Redial

To automatically redial a number when you get the cellular system busy signal (when Snd to Redial appears), press SND so Redial appears. The phone automatically redials the number at regular intervals for up to 4 minutes or until the call goes through.

If the call goes through, the phone rings once (or vibrates, depending on the alert setting) to alert you. Simply begin your conversation as usual when the other party answers.

If the call cannot be completed within 4 minutes (and Snd to Redial appears again), you can press SND again to repeat the redial cycle or END to end the call.

## DISPLAYING NUMBERS

## Your Phone Number

To display your phone number at any time (even while a call is in progress), simply press RCL \# $\#$.

## Notes:

- If you have two phone numbers programmed into your phone (see "Selecting the Active Phone Number" on Page 55), pressing RCL \#- displays the currently active phone number.
- Unless you selected the silent scratchpad function (see "Using Silent Scratchpad" on Page 27), the other party on the line hears tones if you press these or any other keys on your phone during a call.


## A Number Longer than Seven Digits

You can enter and dial phone numbers of up to 32 digits; however, the phone can display only 7 digits at once.

To review the overflow digits of a number 8-10 digits long, press (RCL once. Or, if the number is longer than 10 digits, press (RCL) twice. The phone displays the overflow digits (first to last), up to 7 digits at a time.


## MENU FUNCTIONS

## OVERVIEW

## Turning a Function On/Off

Follow these steps to turn any of your phone's special functions on or off. For a complete description of any function, see the section that describes that function. The page numbers of each of the sections are listed in "Menu Functions List" on Page 24.

1. Press (FCN (1une to access the functions menu. The first function's name and its current status (On or Off) flash on the display.
2. To select a different function, repeatedly press \# $\#$ to scroll forward or $\Psi^{*}$ to scroll backward through the menu until that function appears.
3. Press (STO to turn the function on or (CLR to turn the function off.
Note: A few seconds after you display the function name and status, the phone alternately displays STO-On then CLR-off as a prompt to remind you what key to press.
4. To select and turn another function on/off, repeat Steps 2 and 3.

To exit the functions menu, press END.

## Function Status Quick-Review

Several commonly used functions on your phone (such as the message reminder tone and emergency dialing) are preset to "on" so you can begin using them immediately; however, you can turn any function on or off. Follow these steps to quickly review the names of those functions for which the preset (default) status has been changed.

## Notes:

- You can set all functions back to their default setting at one time. See "Using Master Reset" on Page 64.
- If all functions are set to their default setting, only the current cellular system type setting (such as Home or Scan AB) appears.
- If your phone is set to use the home cellular system type (see "Setting the Cellular System Type" on Page 56), Home always appears as one of the settings during a quick-review.

1. Press (FCN (ore 0 ( $\times \times 9$ ( ${ }^{\text {RCL }}$. The abbreviation for the first changed function (such as Signal Mtr Off for "signal meter off") appears on the display.

Note: For a complete list of all functions and their default settings, see "Menu Functions List" on Page 24.
2. Repeatedly press $-*$ or \# to scroll forward or backward through the abbreviations for all other changed functions (if any).
3. The phone automatically exits the quick-review about 8 seconds after you last press a key. To exit sooner, press END.

Menu Functions List

| Display Shows | Function Description and <br> Default Setting |  | See <br> Page |
| :---: | :--- | :---: | :---: |
| Signal Mtr | Turns off/on the signal <br> strength meter | On | 26 |
| One Min Timr | Sets the phone to sound <br> a tone once each minute <br> during a call | Off | 26 |
| Indiv Timr | Sets the call timer to dis- <br> play automatically during <br> a call | Off | 53 |
| Scrpad Tone | Turns off/on the keypad <br> tones (heard by the other <br> party) | On | 27 |
| Ringer Style | Sets the phone to use <br> one of nine different <br> ringer styles | 1 | 28 |
| Ring Or Vib Sel | Sets the phone to vibrate <br> or ring only, both vibrate <br> and ring, or only display <br> Call (instead of ring or <br> vibrate) to alert you of a <br> call | Ring <br> Only | 29 |
| Keypad Tone | Turns off/on the keypad <br> tones (that you hear) | On | 30 |
| Auto Ansr | Sets the phone to auto- <br> matically answer after <br> two rings | Off | 31 |
| MultKey Ansr | Sets the phone to answer <br> a call when you press <br> one of several keys | Off | 32 |



| Display Shows | Function Description and <br> Default Setting |  | See <br> Page |
| :---: | :--- | :---: | :---: |
| Auto Lock | Sets the phone to auto- <br> matically lock when you <br> turn power on | Off | 46 |
| Turbo Dial | Turns off/on one-touch <br> dialing | On | 32 |
| Emergcy Call | Turns off/on the emer- <br> gency dialing display | On | 33 |
| Number Pref | Can be turned off so the <br> phone displays the speed <br> dial name (instead of the <br> number) first | On | 33 |
| Call Rcv | Sets the phone to alert <br> you of a call using a <br> unique tone (compatible <br> with optional call-forward- <br> ing service) | Off | 34 |
| Remind Msg | Sets the phone to alert <br> you of messages <br> received (with optional <br> messaging services) | On | 35 |
| Select | (Function not available <br> on this phone) | N/A | N/A |
| Languag Sets the phone to auto- <br> matically send a cellular <br> system PIN with every <br> call <br> Inac-  <br> tive  | 59 |  |  |
| Activ |  |  |  |




## USING THE MENU FUNCTIONS

## Turning the Signal Strength Meter Off/On

Your phone is preset to display the signal strength meter each time you turn on the phone, clear the display, or make a call; however, you can set the phone so it does not display the meter. Follow these steps to turn the signal strength meter off or on.

1. Press FCN Nixien . Signal Mtr On or Off flashes
2. Press (CLR so Off appears or sto so On appears.
3. Press END to exit the functions menu. If you turned off the signal strength meter, on appears on the display instead of the signal strength meter.

## Turning the Call-Time Reminder Tone Off/On

The call-time reminder function lets you set the phone to sound a subtle tone 40 seconds after you place or answer a call, then once every minute after that, to remind you of how long you have been on the phone. Follow these steps to turn the call-time reminder tone off or on.

2. Press \# $\#$ once so One Min Timr Off or On flashes.
3. Press sso so On appears or (clr so Off appears.
4. Press END to exit the functions menu.


## Turning the Automatic Call Timer On/Off

To track how long you are on the phone, you can set your phone to automatically display the time (minutes and seconds) you spend on each call. Follow these steps to turn the automatic call timer on or off.

Note: If you turn on the automatic call timer, the phone displays the timer at all times during a call. This uses more battery power than usual.

2. Repeatedly press $-*$ or $\# \rightarrow$ until Indiv Timr Off or On flashes.
3. Press (sto so On appears or (CLR so Off appears.
4. Press END to exit the functions menu.

Note: Your phone also has a resettable call timer and a cumulative call timer. See "Using the Call Timers" on Page 53.

## Using Silent Scratchpad

Your phone is preset to sound dual-tone multi-frequency (DTMF) tones when you press the number keys during a call; however, you can set the phone so it does not sound those tones. This is handy if you plan to use the scratchpad memory during a call, but you do not want the other party on the line to hear tones when you press the keys.

Follow these steps to turn the silent scratchpad on or off.

1. Press FCN (HANET).
2. Repeatedly press $*$ or $\# \rightarrow$ until Scrpad Tone On or $\mathbf{O f f}$ flashes.
3. Press (CLR so Off appears or (STO so On appears.
4. Press END to exit the functions menu.

## Notes:

- In order to send DTMF tones when you use special phone services (such as bank by phone), you must disable the silent scratchpad function before you place the call, or (if silent scratchpad is on) press (RCL) SND after you enter the commands or codes, so your phone sends those entries as DTMF tones. See "Using Touch-Tone Services" on Page 61.
- If silent scratchpad is on, you might hear tones when you press the phone's number keys, but the other party on the line does not hear them.


## Changing the Ringer Style

Your phone has 9 different ringer styles for you to choose from (to help you distinguish your phone's ring from that of another phone, for example). Follow these steps to change the ringer style.

1. Press FCN (Nexien
2. Repeatedly press $\rightarrow^{*}$ or $\#$ until the phone displays Ringer Style and a number from 1-9 (the last selected ringer style).
3. Press sto. The phone sounds the currently selected ringer style, then it displays the prompt Select 1-9.
Note: If your phone is set to vibrate or make no sound/ movement at all when it receives an incoming call (see "Changing the Alert Type" on Page 29), your phone does not sound the ringer tones during this procedure.
4. Press the number keys ( $\mathbf{1}-\sqrt{\omega \times 9}$ ) on the phone's keypad to hear the various ringer styles (or repeatedly press $\square$ or \# to scroll backward or forward and hear each of them).
5. When you hear the ringer style you want to use, press (sTo) to select it. The phone displays Ringer n Set (where $\mathbf{n}$ is the number of the ringer style you selected).
6. Press END to exit the functions menu.

## Changing the Alert Type

Your phone is preset to ring when it receives an incoming call. To avoid disturbing others with a ringing sound, however, you can set your phone to vibrate gently or only flash CALL to alert you of an incoming call.

Here is a quick chart to help you understand how your phone works using the different incoming call alert settings.

| Display Shows | Description |
| :--- | :--- |
| Ring Only | Phone rings as usual and Call flashes |
| Vibrate Only | Phone vibrates three times and Call flashes. |
| Ring On and <br> Vib On | Phone vibrates three times then rings and <br> Call flashes. |
| Ring Off and <br> Vib Off | Silent alert - phone makes no sound or <br> movement, but Call flashes. |

## Notes:

- If the battery is being charged, the phone only rings, regardless of the alert setting. That way, you can hear the phone ring (since you are not carrying/wearing it during charging).
- If the call screening function is turned on, your phone sounds a different alert tone or number of vibrations. See "Using Call Screening" on Page 34.

Follow these steps to change the alert type.

2. Repeatedly press $\rightarrow^{*}$ or $\# \rightarrow$ until Ring Or Vib Sel flashes, then press (sтo to enter the change mode. The current setting (such as Ring Only) appears.
3. Repeatedly press $\rightarrow^{*}$ or $\#$ until you see the setting you want to use, then press sto to select that setting.
4. Press END to exit the functions menu.

Using the Quick-Set Method - To quickly set your phone to ring or vibrate to alert you of an incoming call, press (FCN) tuv8. The phone displays Ring Only (for ring as usual) or Vibrate Only (for vibration alert).

Note: Using the quick-set method to set your phone to ring (Ring Only) automatically disables the silent alert if it is set.

## Turning the Keypad Tones Off/On

Your phone is preset to sound a tone each time you press a key; however, you can turn off the keypad tones. Follow these steps to turn the keypad tones off or on.

2. Repeatedly press $\rightarrow^{*}$ or until Keypad Tone On or Off flashes.

3. Press (ClR so Off appears or sto so On appears.
4. Press END to exit the functions menu.

Note: Regardless of the silent keypad setting, unless you turn on the silent scratchpad function (see "Using Silent Scratchpad" on Page 27), the other party on the line hears tones if you press the keys during a call.

## Using Automatic Answer

The automatic answer function lets you set the phone to automatically answer incoming calls without you having to press a key. When automatic answer is turned on and the phone receives a call, it rings (and/or vibrates), then it automatically answers the call and the InUse indicator begins to flash. Begin your conversation as usual.

Note: To prevent your phone from answering incoming calls without any easily noticeable indication (such as a ring or vibration), we recommend you not use the silent alert and automatic answer functions at the same time.

Follow these steps to turn the automatic answer function on or off.

2. Repeatedly press $\boldsymbol{Z}^{*}$ or $\#$ until Auto Ansr Off or On flashes.
3. Press (sto so On appears or (CLR so Off appears.
4. Press END to exit the functions menu.

## Using Multiple Key Answer

Your phone is preset to answer an incoming call only when you press SND; however, you can set the phone to answer a call when you press any of these keys after the first ring (or vibration): SND, any number key ( 1 - $\omega \times 9$ ), or either volume button.

Follow these steps to turn multiple key answer on or off.

1. Press FCN (쌔NiN).
2. Repeatedly press $\rightarrow$ or $\#-$ until MultKey On or Off flashes.
3. Press (sto so On appears or (CLR so Off appears.
4. Press END to exit the functions menu.

## Turning One-Touch Dialing Off/On

Your phone is preset to automatically dial a number stored in memory locations 01-09 when you hold down that number key for about 1 second; however, you can disable one-touch dialing. Follow these steps to turn one-touch dialing off or on.
Important: Disabling one-touch dialing also prevents you from making emergency calls using the 1 key (see "Making Emergency Calls" on Page 19).

1. Press FCN Mex
2. Repeatedly press $-*$ or $\# \rightarrow$ until Turbo Dial On of $\mathbf{O f f}$ flashes.
3. Press (CLR so Off appears or (STO so On appears.
4. Press END to exit the functions menu.



## Turning the Emergency Display Off/On

Your phone is preset to display Emergcy when you hold down 1 to make an emergency call; however, you can set the phone so Emergcy does not appear (if you did not store an emergency number in memory 01, for example).

Follow these steps to turn the emergency display feature off or on.

1. Press $F C C$ )
2. Repeatedly press $*$ or $\# \rightarrow$ until Emergcy Call On or Off flashes.
3. Press (CLR so Off appears or STO so On appears.
4. Press END to exit the functions menu.

## Turning the Number Display Preference Off/On

When you recall a speed dial memory (see "Speed Recall/Dialing" on Page 39), your phone is preset to display the number stored in memory before it displays the name (if any); however, you can set it to display the name first.

Follow these steps to turn the number preference off or on.

1. Press $F C N$,
2. Repeatedly press $\rightarrow^{*}$ or $\# \rightarrow$ until Number Pref on or Off flashes.
3. Press (clr so Off appears or sto so On appears.
4. Press END to exit the functions menu.


## Using Call Screening

The call screening function lets you set your phone so Call appears and the phone sounds several unique beeps (or vibrates) when it receives a call, but you cannot answer the call. The caller receives the standard "not in service" message that they would normally hear when you have the phone turned off. This function is handy if you want to use your phone only for outgoing calls.

Note: If your carrier offers no-answer transfer service (like call forwarding) and you subscribe to that service, turning on your phone's call screening function so means Call appears and the phone sounds several unique beeps (or vibrates) when a call is received and is being transferred.

Follow these steps to turn call screening on or off.

1. Press FCN NAMAN
2. Repeatedly press $-*$ or $\# \rightarrow$ until Call Rcv On or Off flashes.
3. Press (clr so Off appears or (STO so On appears.
4. Press END to exit the functions menu.



## Turning the Message Reminder Tones Off/On

If your cellular carrier offers a special messaging service, and you subscribe to that service, your phone is preset to beep every 2 minutes until you read all new messages, but you can turn off the tones.

Note: If you do not subscribe to a messaging service, the reminder tone function has no effect on your phone.

Follow these steps to turn the message reminder tones off or on.

1. Press FCN Nexien .
2. Repeatedly press $\rightarrow^{*}$ or until Remind Msg On or Off flashes.
3. Press ©LR so Off appears or sto so On appears.
4. To exit the functions menu, press END .


## USING MEMORY

Your phone has 50 speed-dial memory locations that can each hold a phone number (up to 32 digits) and a name (up to 14 characters, including spaces).

## STORING SPEED DIAL NUMBERS

Note: If you are unable to complete Steps 1 and 2 within 8 seconds, the display goes blank to conserve battery power. Press END to recall the display, then try the steps again.

1. Clear the display (if necessary), enter the phone number you want to store, then press (sTo. The phone displays Locatn (location) then $\qquad$
2. Within 8 seconds, enter the 2-digit memory location number (01-50) where you want to store the phone number, or press $\rightarrow^{*}$ to automatically select the first unused memory location. Alpha or STO appears to prompt you for the next step.

## Notes:

- Remember that your phone uses memory location 01 for one-touch emergency dialing. Store only your local emergency number (such as 911) in that location.
- If you enter an invalid location number (such as 51), the phone displays Invalid Locatn followed by the location prompt. Enter a valid location number.

3. To enter the phone number without entering a name, skip to Step 4.

Or, for each letter of the speed-dial name you want to enter, repeatedly press the key ( $\triangle \overline{A B C 2}$ 2, $\sqrt{D E F} 3$, and so on) that contains that letter, then press \# $\#$ to move the cursor to the next position.


For example, to enter the letter Y , press $\omega \times \mathbf{9}$ three times (since the letter Y is third in the series of letters on that key).

## Notes:

- To store a space, press \# - twice (without entering a letter).
- To enter the letter $Q$ (even though it is not printed on the key), press PRs 7 twice. The other letters ( $\mathrm{P}, \mathrm{R}$, and $S$ ) appear in sequence before/after $Q$ as they do in the alphabet.
- If you make a mistake, repeatedly press (clr or $\Psi^{*}$ to erase each incorrect character, then enter the correct character(s).

4. When you finish, press sso to store the information in memory. The selected memory location number appears on the display to confirm the entry.
Note: If you previously stored information in the selected memory location, or if the phone's memory is full, the selected memory location number and Full appear briefly, then the currently stored information and Change? flash on the display.

To select a different memory location, press END then sion, enter the new memory location number (or press $\because$ * to automatically select the first unused location), then press (sTo.

To use the selected memory location and replace the information currently stored there, press (sTo).

## Storing Speed Dial Numbers in Blocks

To help you organize and easily recall information, you can store speed dial numbers in "blocks," so numbers with similar characteristics (such as family, friends, services, and so on) are stored together.

The memory blocks in your phone are divided this way:

| Block Number | Includes Memory Locations |
| :---: | :---: |
| 0 | $01-09$ |
| 1 | $10-19$ |
| 2 | $20-29$ |
| 3 | $30-39$ |
| 4 | $40-49$ |
| 5 | 50 |

To store a number in a memory block, follow Steps 1-4 in "Storing Speed Dial Numbers," but in Step 2, enter the block number then press $-*$. The phone automatically selects the first unused memory location in the selected block.

Note: If the block you select is full, Full and the last memory location number in that block appear briefly, then the currently stored information and Change? flash on the display.

To select a different memory block, press END then (STO), enter the new block number, then press $\rightarrow^{*}$.

To store the number in the last available memory location of the current block and replace the information currently stored there, press (sio).


## ONE-TOUCH DIALING

To quickly place a call to any number stored in memory locations 02-09 (without pressing SND), simply hold down that number key for about 1 second. The InUse indicator flashes and the phone briefly displays Dialing then the number called, then the signal strength meter.

## SPEED RECALL/DIALING

If you know the memory number you want to use, simply enter that number (such as 06), then press SND to place the call.

If you know the memory number you want to use, but you want to review the stored information (just to be sure!) before you place the call, press ®CL then enter the memory location number. The memory number and phone number flash on the display. To place the call, press SND.

The InUse indicator flashes and the phone briefly displays Dialing, then the number called, then the signal strength meter.

## Notes:

- To view the name stored in a memory location when the phone and memory numbers appear, press (RCl). To view the numbers again, press RCL.
- You can set the phone so it displays the name (instead of the phone number) first when you select a specific memory location number. See "Turning the Number Display Preference Off/On" on Page 33.




## MEMORY SCROLLING/DIALING

## Scrolling by Name (Alphabetical Order)

Your phone stores names in alphabetical order, based on the first few characters of the name. Follow these steps to scroll through memory by name.
 ory.

## Notes:

- If no names are stored in memory, NoNames Stored appears.
- If you press (Hexiic immediately after recalling/dialing another memory name/number, that memory name appears first.

2. To scroll forward through all names in memory, repeatedly press \# $\#$.

To start scrolling forward from a specific letter of the alphabet, enter the letter (press AABC2 three times to enter C , for example). The first name that starts with that letter appears.

## Notes:

- When you reach the last name in memory (or any time after you first press \# $\#$ ), you can press $\rightarrow^{*}$ to scroll backward through the names.
- If there are no names stored under the selected letter (C, for example), the phone displays No C's followed by the next name in memory.
- To view the memory number and phone number of a selected name, simply press RCL. To view the name again, press


3. When you see the name you want to use, press SND to place the call.

## Scrolling by Memory Location Number

1. Press RCL.
2. Press orese 1 to start scrolling from the first memory location, or enter a specific memory number (such as 11) that you want to start from. The memory number followed by ' (to indicate scrolling is active) and the stored phone number flash on the display.

Note: If the memory number you selected is unused, the memory number ( $03^{\prime}$, for example) appears steadily.
3. Repeatedly press \# or $-*$ to scroll forward or backward through the numbers.

Notes: To view the name stored in the selected memory, simply press RCL. The phone number automatically reappears after a few seconds.
4. When you see the name or number you want to use, press SND to place the call.

## Scrolling While a Call is in Progress

For convenience (so you can see if you have a caller's phone number, for example), your phone lets you scroll through memory while a call is in progress. Simply follow the steps to scroll by name or memory location number, but press END instead of SND when you finish.

## CHANGING INFORMATION IN A MEMORY LOCATION

1. Recall the memory location information.
2. Press ®Cl) (if necessary) to display the phone number.
3. Repeatedly press (CLR to backspace and erase digits, then enter the correct numbers; or, to simply add digits to the existing number, enter the additional numbers. Then press sio and enter the two-digit memory number. Alpha or STO appears to prompt you for the next step.
Note: If you enter an invalid location number (such as 51), the phone displays Invalid Locatn followed by the location prompt. Enter a valid location number.
Or, if you want to edit only the name, press sso, enter the two-digit memory location number, then skip to the next step.
4. Repeatedly press © (CRR or $-\star$ to erase each character you want to change, then enter the correct character(s). Or, to simply add characters to the existing name, enter the additional characters.
Or, if you do not want to edit the name, skip to the next step.
5. Press sion. The selected memory number and Full appear briefly, then the phone number and Change? flash. Press (sto) again to store the edited memory. The memory location number appears briefly to confirm the entry.

## CLEARING A MEMORY

With a name and number - Follow these steps to clear a memory that has a name and phone number (or only a name) stored in it.

1. Press (uxise to display the first name stored in memory, then repeatedly press $\# \rightarrow$ until the name you want to clear appears.
2. Press CLR. Clear? appears.
3. To clear the selected memory, press (STO. The selected memory location number appears, confirming the entry.

To exit without clearing the selected memory, press END.
Only a Number - Follow these steps to clear a memory that has only a phone number stored in it.

1. Press (cli sto, then enter the 2-digit memory location number you want to clear. Alpha or STO appears to prompt you for the next step.
2. Press (ST0. The memory location number, phone number, then Full briefly flash. Then the phone number and Change? flash.
3. To clear the selected memory, press (\$TO). The selected memory location number appears, confirming the entry.
To exit without clearing the selected memory, press END.


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## USING SCRATCHPAD MEMORY

Your phone's scratchpad memory lets you temporarily store a telephone number on the display during a call. This is handy, for example, when someone gives you a number during a call and you don't have a place to write it down.

To store a number in the scratchpad memory during a call, simply press the keys to enter that number. After you press END to end the call, you can press SND to immediately dial the scratchpad memory number.

Note: Unless you previously selected the silent scratchpad feature (see "Using Silent Scratchpad" on Page 27), be sure to tell the other party on the call that they will hear tones as you press the keys to enter the number.

## MEMORY DIALING TIPS

## Frequently Dialed Area Codes/Prefixes

To reduce the number of keystrokes you use to dial frequently called area codes or prefixes, store that area code or prefix (including the 1 , if necessary) in memory. To dial a number using that memory, simply recall that memory, enter the remaining digits of the telephone number you are calling, then press SND to place the call.

## Banking or Other Phone Services

For convenience, you can store in your phone's memory the touch-tone command sequences you use when calling your bank or other phone services. See "Using Touch-Tone Services" on Page 61.

## SECURITY FEATURES

## LOCKING YOUR PHONE

To prevent unauthorized use of your phone, you can enter a 3 -digit code to lock your phone at any time (see "Using Manual Lock"). For added convenience, you can also set the phone to automatically lock every time you turn it on (see "Using Automatic Lock" on Page 46).

When the phone is locked, Locked appears when you press any key (except (ewr). When the phone is locked and receives a call, it rings or vibrates as usual. To answer the call, you must enter the lock code and then press SND.

Your phone's preset lock code is 123. For added security, you can change the code to one that you can easily remember. See "Changing the Lock Code" on Page 46.

Note: If you lock your phone then forget the lock code, you can enter a 6-digit security code to display the lock code. See "Displaying the Lock Code" on Page 47.

## Using Manual Lock

Follow these steps to lock or unlock your phone at any time.

1. Press $\mathbb{F C N}$, then hold down uk 5 until the phone displays Lock?
2. To lock your phone, press (sT0 within 8 seconds. Locked appears and the green power/lock indicator lights steadily.

To exit without locking the phone, press END.
Note: If you do not press (sTo within 8 seconds, your phone automatically exits the lock program without locking the phone.


The phone remains locked until you unlock it. To unlock your phone, simply enter the 3-digit lock code so Locked disappears. If you make a mistake, press © ©

## Using Automatic Lock

The automatic lock feature lets you set your phone to automatically lock each time you turn it on. When automatic lock is turned on, Locked appears after the self test when you turn on the phone. To use the phone, you must unlock it.

Follow these steps to turn automatic lock on or off.

2. Repeatedly press $-*$ or \# until Auto Lock Off or On flashes.
3. Press (STO so On appears or (CLR so OFF appears.
4. To exit the functions menu, press END.

## Changing the Lock Code

For added security, you can change the lock code, but you must enter a preset 6-digit security code first. Your phone's preset security code is 000000 (you cannot change this code).

Follow these steps to change your phone's lock code.
Note: The phone's display does not change (no characters appear when you press the keys) until you press (sTo) in Step 4.

1. Press $\mathbb{F C N}$ Cobse 0 .

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2. Enter the 6-digit security code.
3. Enter the new 3-digit lock code you want to use.
4. Press sTo. The phone displays Changed To and the new lock code.
5. Press ©LR to clear the lock code message from the display.

## Displaying the Lock Code

If you change your lock code then forget it, you can use your phone's preset security code (000000) to display the current lock code.

Follow these steps to display the current lock code.
Note: The phone's display does not change (no characters appear when you press the keys) until you press incl in Step 3.

1. Press $\operatorname{FCN}$ Oera 0 .
2. Enter the 6-digit security code.
3. Press RCL. The phone displays LocCode and the currently set 3-digit lock code.
4. Press ©LR to clear the lock code message from the display.


## USING SERVICE RESTRICTIONS

Your phone is preset to let you (or anyone else) dial any type of number (local or long distance) and freely access any information stored in its memory. To prevent unauthorized use of your phone, however, you can enter your phone's preset security code (000000) and set any of these varying levels of service restrictions.

| Service <br> Level | Description |
| :---: | :--- |
| 1 | Calls can be placed only to numbers <br> stored in memory locations 01-10 using <br> speed dialing. Otherwise, the keypad is <br> locked. The memory cannot be accessed <br> or changed. |
| 2 | Calls can be placed only to numbers <br> stored in memory. Otherwise, the keypad <br> is locked. The memory cannot be <br> changed. |
| 3 | Calls can be placed only by direct dialing <br> using the keypad. The memory cannot be <br> accessed or changed. |
| 4 | No restrictions (default setting). |
| 5 | 7-digit (local) dialing only. |
| 6 | Calls can be placed to numbers stored in <br> memory or using direct dialing on the key- <br> pad. The memory cannot be changed. |

Note: Your phone is preset to service level 4.



Follow these steps to change the service restriction level on your phone.

Note: The phone's display does not change (no characters appear when you press the keys) until you press (sтo in Step 4.

1. Press FCN ©oes 0.
2. Enter the 6-digit security code.
3. Enter the service level (1-6) you want to use.
4. Press (sto. The phone displays Service Level and the service level number you entered (such as Service Level 5).
5. Press ©LR to clear the service level message from the display.

If you selected a service levels other than level 4, the phone sounds a "no service" fast busy signal when someone tries to use a restricted feature on the phone. To cancel that busy signal, press END.

## OTHER FEATURES

## USING THE MESSAGING FUNCTIONS

Some cellular systems provide services that can send up to three different types of messages to your phone, including calling line ID, voice mail notification, and short (alphanumeric) messages. Your phone is preprogrammed to work with these services.

Note: In order to use these functions on your phone, your cellular carrier must provide, and you must subscribe to, these services. Otherwise, selecting or setting them will have no effect. For more information about these services, call your cellular carrier.

## Overview/Receiving Messages

When your phone is turned on and receives calling line ID, voice mail notification, or short message data from your cellular carrier, it alternately displays:

| You See | Meaning |
| :---: | :--- |
| xx New | Number (xx) of new messages received |
| YY Total | Total number (YY) of messages currently <br> stored in the message stack |

Your phone stores each message in a special memory area called the "message stack." The message stack can hold up to 20 messages at once, with messages stored in order from newest (memory position 1) to oldest (memory position 20).


## Notes:

- If the message stack is full ( 20 messages are currently stored) and the phone receives a new message, it automatically stores the new message and deletes the oldest message in the stack.
- Your phone does not receive messages while it is turned off. Contact your cellular carrier to find out how the carrier handles undeliverable/queued messages.


## Viewing/Recalling Messages

1. Press and release ${ }_{\text {RCL }}$, then hold it down for about 1 second. The phone displays the first (newest) message in the stack.

If the message is a calling line ID message, the phone briefly displays CID yy (where yy is the message number) then the number of the party that called (up to 14 digits).

If the message is a short (text) message, the phone briefly displays yy New (where yy is the message number of a new message) then the message (up to 14 characters).

If the message is voice mail notification, the phone displays the message data (such as a message number and number of total/new messages waiting) sent by your cellular carrier. The type and format of the message waiting information sent varies by carrier - contact your cellular carrier for more information.

Note: If there are no messages in the stack, the phone displays No Msgs for about 8 seconds then exits the message display. To exit sooner, press (CLR).
2. To view another message, repeatedly press $\rightarrow^{*}$ (to scroll backwards) or \# - (to scroll forwards) until that message appears.
3. When you finish, press END to exit the message function.

## Deleting Messages

To delete an individual message, recall that message, then hold down (CLR until the phone displays Deleted.

To delete all messages in the stack, while viewing any message, hold down (CLR until the phone displays Deleted (briefly) then Erase All. Then press (ClR) again to confirm the deletion.

When you finish, press END to exit the message function.

## USING THE PHONE WITH HANDSFREE EQUIPMENT

Your phone is preprogrammed to work with most optional handsfree equipment that lets you automatically switch from handset to handsfree mode in your vehicle when you place the phone in the handsfree holder.

Some handsfree equipment might require you to turn off (mute) the phone's microphone when switching to handsfree, using the procedure described in "Using Mute" on Page 18. See the owner's manual provided with your handsfree equipment for more information, or contact your local RadioShack store for assistance.

## USING THE CALL TIMERS

Your phone has three call timers that let you check the length of your calls ("air time"):

- Individual call timer - times each call you make or answer in minutes and seconds, and automatically resets each time you make or answer a call or turn off the phone. See "Displaying the Individual Call Timer."
- Resettable call timer - times the calls you make or answer in minutes, and it can be reset at any time. See "Using the Resettable Call Timer" on Page 54.
- Cumulative call timer - times all the calls you make or answer in minutes, and it cannot be reset. See "Displaying the Cumulative Call Timer" on Page 54.


## Notes:

- Each call timer begins counting when you hear the first ring (during an outgoing call) or when your phone rings (or vibrates) to signal an incoming call.
- If your phone receives a call but you do not answer it, each timer resets to the time it had before it received that incoming call.


## Displaying the Individual Call Timer

The individual call timer tracks each call you make in minutes and seconds, and automatically resets each time you make or answer a call or when you turn off the phone.

To display the individual call timer for the last call, press (RCL) \# - \# - . The air time of your last call (such as 0045 to show 45 seconds) appears for about 15 seconds. Press any key to clear the display sooner.

If you press ®CL \# \# \# during a call, the air time of the call flashes on the display until you clear the display or end the call.

Note: To set your phone so it displays the individual call timer automatically, see "Turning the Automatic Call Timer On/Off" on Page 27.

## Using the Resettable Call Timer

The resettable call timer tracks the calls you make or answer in minutes, and it can be reset at any time. You can reset this timer to coincide with your cellular billing statement date, for example, then track your monthly air time.

To display the resettable call timer, press $\overparen{\text { RCL } \#-\#-}$ \# - . The phone displays Resetbl and the number of air time minutes (such as 00215) accumulated since you last reset the timer. Press any key to clear the timer from the display.

To reset the timer, with the display clear, press FCN $\operatorname{Cose} 0$ Prs7 (CLR).

## Displaying the Cumulative Call Timer

The cumulative call timer tracks all the calls you make or answer in minutes. It cannot be reset.

To display the cumulative call timer, press ®CL, \# - \# \# $\|^{\#} \rightarrow$. The phone displays Cumul and the number of air time minutes (such as 00846 ) accumulated since the first call was made or answered on your phone. Press any key to clear the timer from the display.


## SELECTING THE ACTIVE PHONE NUMBER

If you subscribe to two cellular services (for example, competitive cellular systems in your area or cellular systems in different cities), your dealer programs your phone with two different phone numbers.

If you have two phone numbers programmed into your phone, the phone displays one of the following messages each time you turn it on, to indicate which cellular system type and phone number are currently active.

| Phone <br> Number | Cellular System Type | Display Shows |
| :---: | :--- | :---: |
| 1 | Non-wireline (type A) | A1 |
| 2 | Non-wireline (type A) | A2 |
| 1 | Wireline (type B) | B1 |
| 2 | Wireline (type B) | B2 |

Note: To set the cellular system type, see "Setting the Cellular System Type" on Page 56.

To deactivate the phone number currently selected and activate the other phone number, press RCL \# \# (sio). The display briefly blanks, then the currently active number appears to confirm your selection. To clear the display when you finish, press (cLR).


## Notes:

- Calls can be made on your phone from only one phone number at a time, and you cannot activate the other phone number while a call is in progress.
- To receive calls on both numbers at the same time (if you subscribe to no-answer transfer or call forwarding service through your cellular carrier), you can set both numbers to forward to the other number if not answered. Otherwise, a caller who calls the inactive number receives the standard "not in service" message.


## SETTING THE CELLULAR SYSTEM TYPE

Each cellular market area has two cellular service providers. One of the providers is designated Provider A and the other Provider $B$. When your phone is activated for service, find out from your dealer whether your cellular provider is type A or B.

## Notes:

- Usually, it is less expensive to use the same company for cellular service when you are in your home city and when you roam (see "Roaming" on Page 59). To do this, you need to know whether your cellular service provider is type A or B in your home city and in each city where you plan to travel.
- It is possible for a cellular service provider to be (or have agreements with) Provider A in some cities and Provider $B$ in others.


Your phone's selectable system registration function lets you select one of six possible roaming modes:

| Roaming Mode Description | Display |
| :---: | :---: |
| Standard Mode - the phone first seeks a home type system, then it seeks a non-home type. <br> If you are using a type A (non-wireline) home system If you are using a type $B$ (wireline) home system | Std AB <br> Std BA |
| Invert Preference Mode - the phone first seeks a nonhome type system, then it seeks a home type. (Select this setting while on the fringe of your home area or in certain roaming situations.) <br> If your home system is non-wireline (type A): <br> - Roam flashes rapidly - call on system B <br> - Roam flashes slowly - call on home type system <br> - InUse flashes slowly - call on home system <br> If your home system is wireline (type B): <br> - Roam flashes rapidly - call on system A <br> - Roam flashes slowly - call on home type system <br> - InUse flashes slowly - call on home system | ScanBA <br> ScanAB |
| Home Only Mode - the phone will not operate outside your home system. | Home |
| Scan A Mode - the phone will operate only within non-wireline (A) systems. | Scan A |
| Scan B Mode - the phone will operate only within wireline (B) systems. | Scan B |
| SID Mode - the phone automatically scans for one or more preferred systems to use and one or more systems not to use. System IDs must be preprogrammed by the dealer; preferred system (SID) feature requires special service (contact your cellular carrier). | P Scan |




## Displaying the Currently Selected System Type

To display the system type currently selected on your phone, press (RCL) **. The currently selected system type (such as Std BA) appears for about 8 seconds. To clear the display sooner, press END.

## Selecting the Cellular System Type

Note: If you are unable to complete Steps 2 and 3 within 8 seconds, the display clears without changing the system type. Start at Step 1 and try again.

1. Press © RCL $^{*}$. The currently selected system type appears.
2. Repeatedly press $\rightarrow^{*}$ or $\# \rightarrow$ until you see the system type you want to use.
3. To store the displayed system type, press (sto. The phone briefly displays Set to confirm your selection.

To exit without changing the system type, press END.

## ROAMING

In some areas, the cellular system's computer automatically recognizes roaming telephones. In other areas, you must contact the service provider before it can recognize your phone. The operator needs to know your telephone number, your phone's ESN (Electronic Serial Number), and how you plan to pay for your calls. There is normally an additional charge for roaming calls.

Note: Your phone's ESN is under the phone's battery; however, the roaming cellular service provider can usually automatically determine your phone's ESN when you call.

When you roam, the Roam indicator on your phone flashes slowly when the phone is using a home-type cellular system. The indicator flashes rapidly when the phone is using a cellular system that is different from your home system.

## USING CELLULAR SYSTEM PIN DIALING

Your cellular carrier might require that you use a personal identification number (PIN) when you make calls. This number assures the cellular system that the person placing the call is an authorized user.

Contact your cellular service provider to determine if a PIN is required and obtain the PIN (7 digits or less) to place calls through the cellular system you subscribe to. If a PIN is required, follow the steps in "Storing Speed Dial Numbers" on Page 36 to store your PIN in memory 07, then follow the steps in "Enabling/Disabling PIN Dialing" on Page 60 to enable PIN dialing on your phone.


## Notes:

- Enable PIN dialing on your phone only if it is required by your cellular provider.
- You must store your PIN in memory 07, otherwise your phone cannot properly make calls through your cellular system.
- If you enter a service area that does not require PIN dialing, disable PIN dialing on your phone.


## Enabling/Disabling PIN Dialing

1. Press (FCN (xikN to access the functions menu.
2. Repeatedly press $\rightarrow^{*}$ or $\#$ until PIN InActive or Active flashes.
3. Press sto so Active appears or (CLR so InActiv appears.
4. Press END to exit the functions menu.

## Making a Call Using Your PIN

1. Dial or speed dial the number you want to call, as usual, then press SND.
2. When you hear the tones (2 beeps), press SND again. The phone automatically sends your PIN code to finish dialing the call.

Note: If you did not store your PIN in memory 07, or you stored an incorrect PIN, Invalid PIN appears. Be sure your PIN is correct, then try again.



## USING TOUCH-TONE SERVICES

To use your cellular phone to control answering machines and special telephone services (such as bank-by-phone or voicemail), simply enter touch-tone commands using your phone's keypad after the service answers (and when prompted).

Note: If the silent scratchpad function is turned on, you must press © ${ }^{\text {RCL }}$ SND to send the tones after entering each set of touch-tone commands.

Or, you can store the service's command sequence in a memory location. After the service answers (for each sequence you want to send), simply recall the memory location that contains the command sequence and press RCL SND.

## Adding a Pause

Some services, such as voicemail, require you to enter an access code then wait before entering additional digits. To include one or more pauses in a sequence when storing it in memory, press (FCN) SND so Insert Pause o flashes, then press (sio). The phone displays o wherever you insert a pause.

Note: If you do not press (sTo within 8 seconds, the display clears. Simply press the key for the next digit you want to enter or store. The characters you previously entered appear along with the pause you just entered.

When you send a sequence with pauses stored in it, the phone stops at each place in the sequence where you entered a pause. To send the next group of numbers in the sequence, press SND again.

## CALLING CARD DIALING

To use your cellular phone to dial long distance numbers with a calling card number, you can simply dial as you usually would (for example, dial 0 and the telephone number then press SND, then enter your calling card number when you hear the prompt).

For convenience, your phone lets you store a calling card sequence in memory with your long distance carrier's calling card PIN. When you use this stored sequence to make a call, the phone automatically sends the required calling card information and prompts you to enter the telephone number you want to call.

## Storing a Calling Card Sequence

1. If you dial a regular phone number (such as a 1-800 number) to start a calling card call, enter that number, then enter a pause (press (FCN SND (STO).
Or, if you dial 0 before the telephone number to start a calling card call, press ores 0 so 0 appears.
2. Press ( ${ }^{\circ C N}$ SND \# $\#$ so Insert Num ' $N$ flashes.
3. Within 8 seconds, press (sTo so ' $\mathbf{N}$ appears after the numbers you previously entered. ('N represents the place where the phone will prompt you to enter the area code and number you want to call.)

Note: If you are unable to press sio within 8 seconds, the display clears. Press any key to recall the display.
4. Enter another pause.
5. Enter your calling card PIN number.


6. Within 8 seconds, press (sio then enter the 2-digit memory location number $(01-50)$ where you want to store the card sequence, or press $\Psi$ to automatically select the first unused memory location. Alpha or STO appears to prompt you for the next step.
Note: If you are unable to complete this step within 8 seconds, the display goes blank. Press END (sTo to recall the display and try again.
7. Enter the name to describe this calling card sequence (XYZ LONG DIST, for example), then press (sto. To proceed without storing a name, simply press (sio).The phone displays the memory location number you selected to confirm the entry.

## Placing a Call Using a Stored Calling Card Sequence

1. Recall the calling card sequence from memory, then press SND to dial the call. (Or, if you stored the sequence in any memory from 02-09, simply hold down that number for one-touch dialing.) Enter Number appears. This prompts you to enter the area code and phone number you want to call.
2. Enter the area code and phone number you want to call, or recall that number from memory, then press SND. The phone begins dialing the call.
Note: When you press the keys, the phone sounds different tones than the ones it normally makes.
3. When you hear the prompt, press SND to dial the calling card PIN (or other information you stored in the calling card sequence).

Note: Repeat this step for each sequence you stored.

## RESETTING THE PHONE



USING MASTER RESET
Master reset lets you enter the phone's preset security code (000000) and reset all of the phone's special functions to their default settings (see "Menu Functions List" on Page 24), but it does not clear any information you stored in memory.

Follow these steps to perform master reset.

1. Press FCN OOER O.
2. Enter the 6-digit security code twice.
3. To reset the phone, press 1 STO. The phone displays Std Setting (standard setting) and begins to reset.
When the phone finishes resetting (when Std Setting disappears), you can use it as usual.

Note: Depending on your phone's settings, the phone might take several minutes to reset.
To exit without performing master reset, press END.

## USING MASTER CLEAR

Master clear lets you enter the preset security code (000000) to do the following:

- Reset all of the phone's special functions to their default settings (see "Menu Functions List" on Page 24)
- Delete all information stored in memory
- Clear the resettable call timer

Follow these steps to perform master clear.
Caution: Performing master clear deletes all information stored in memory.

1. Press FCN orese 0 .
2. Enter the 6-digit security code twice.
3. To clear the phone, press $\omega \times 9$ ( sTo.

When the phone finishes resetting (when Busy disappears, for example), you can use it as usual.

Note: Depending on your phone's settings and the amount of information stored in memory, Busy might appear, the phone might sound a continuous beep, and it might take several minutes to finish clearing.

To exit without performing master clear, press END.


## TROUBLESHOOTING

## If the phone's power does not come on or stay on:

- Make sure the battery is properly installed and charged.
- Be sure that the contacts on the battery are clean. If they are not, clean them with a soft cloth or pencil eraser.
- The battery charge might be too low for operation. Check the display and listen for the low battery warning tones.


## If the power comes on, but the phone does not work:

- Make sure that the antenna is fully extended.
- Be sure you selected the correct cellular system type (see "Setting the Cellular System Type" on Page 56).
- Make sure that functions you might have previously selected (but forgotten) are not causing the phone to operate differently than you expect it to (see "Function Status Quick-Review" on Page 23).
- Check the display for error messages.

If you see an error message that is not covered in any section in this Owner's Manual, or if your phone does not seem to be operating properly, contact your local RadioShack store for assistance.

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## SAFETY INFORMATION

## TRAFFIC SAFETY

- Do not use a handheld phone while driving a vehicle. If using a handheld phone, park the vehicle before taking or making a call.
- Always secure the phone in its holder; do not place the phone on the passenger seat or where it can break loose in a collision or sudden stop.
- Never install a phone alert device that operates your vehicle's lights or horn. This is illegal in most areas.

Remember, always put road safety first!

## OPERATING ENVIRONMENT

- Remember to follow all special regulations and always turn off your phone whenever you are required to do so, or when it might cause interference or be dangerous.
- Any radio transmitting equipment, including cellular phones, might interfere with inadequately protected medical devices. Consult a physician or the manufacturer of the medical device if you have any questions. Other electronic equipment might also be subject to interference.
- As with other mobile radio transmitting equipment, for your safety, only use your phone in the normal operating position (held to your ear with the antenna pointing over your shoulder).
- Turn off the phone while getting gasoline (at a filling station). Observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants, or around blasting operations.

- Do not store or carry flammable liquids, gases, or explosive materials in the same compartment as a cellular phone or any of its parts or accessories.
- Only qualified personnel should install or service the phone in a vehicle. Faulty installation or service might be dangerous and could invalidate the phone's warranty.
- Electronic fuel injection systems, electronic anti-lock braking systems, electronic cruise control systems, and other electronic systems can malfunction due to the lack of protection from radio signals. Check regularly that all cellular phone equipment in your vehicle is mounted and operating properly.
- Turn off your cellular phone when in an aircraft. The use of cellular phones in an aircraft might be dangerous to the operation of the aircraft, disrupt cellular networks, and is illegal.

Failure to observe these instructions could lead to suspension or denial of cellular telephone services, legal action, or both.

## EMERGENCY CALLS

IMPORTANT! This phone, like any cellular phone, operates using radio signals, cellular, and land-line networks, as well as user-programmed functions. These factors make it impossible to guarantee connection in all conditions. Therefore, you should never rely solely upon any cellular phone for essential communications (such as medical emergencies).

Remember, to make or receive any calls, the phone must be turned on and in a service area with adequate cellular signal strength.



## FCC REGULATIONS

A cellular phone might cause TV or radio interference, even when it is operating properly. The FCC can require you to stop using your cellular phone if you cannot eliminate the interference. If you need assistance, contact your local RadioShack store.

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

## CARE AND MAINTENANCE

Your RadioShack CT-502 Flip-Style Handheld Cellular Telephone with Silent Vibrating Alert is an example of superior design and craftsmanship. The following suggestions will help you care for your phone so you can enjoy it for years.

- Keep the phone and all of its parts and accessories out of the reach of children.
- Keep the phone dry. Liquids might contain minerals that corrode electronic circuits.
- Do not use or store the phone in dusty, dirty areas. Its moving parts can be damaged.
- Do not store the phone in hot areas. Temperature extremes can shorten the life of electronic devices, damage batteries, and warp or melt plastic parts.
- Do not store the phone in cold areas. When the phone warms up (to its normal operating temperature), moisture can form inside the phone, which could damage the phone's electronic circuits.
- Do not drop, knock, or shake the phone. Rough handling can break internal circuit boards.
- Wipe the phone with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean your phone.

Modifying or tampering with the phone's internal components can cause a malfunction and invalidate your phone's warranty and void your FCC authorization to operate it. If your phone is not performing as it should, take it to your local RadioShack store for assistance.


Transmitting Power: $0.6 \mathrm{~W}+2 \mathrm{~dB}-4 \mathrm{~dB}$

Operating Voltage: $\qquad$ $\mu 5.2-7.5$ DC
Internal battery: 6.0V DC

Input to AC charger: $\qquad$ 110V AC

Frequency Band: $\qquad$ 824-849 MHz (TX) 869-894 MHz (RX)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

## PATENT INFORMATION

This phone is manufactured under one or more of the following U.S. patents.

| 4121218 | 4617520 | D295975 | 4965537 | D327061 | 5261119 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4124879 | D286778 | 4751737 | 4972355 | 5128834 | 5262710 |  |
| 4127824 | 4626309 | D296187 | 4972432 | D328302 | 5263052 |  |
| 4128740 | 4628529 | 4761621 | 4972455 | 5142551 | 5276707 |  |
| 4138681 | 4629829 | 4764737 | 4975808 | 5142696 | 5278994 |  |
| 4193036 | 4630304 | D297734 | 4984290 | 5146620 | D343173 |  |
| 4254382 | 4630305 | D297735 | D314173 | 5148471 | 5280637 |  |
| 4302845 | 4633141 | 4777564 | D315330 | 5148473 | D344087 |  |
| 4312074 | 4636593 | Re32768 | D315346 | 5148961 | 5287553 |  |
| 4327319 | 4636741 | D299136 | D315543 | 5150359 | 5287555 |  |
| 4329666 | D288432 | 4797929 | D315559 | 5150384 | 5287556 |  |
| 4369516 | 4648125 | 4798975 | D315565 | 5152006 | D344511 |  |
| 4369522 | 4649543 | 4800348 | 5004992 | 5157693 | 5301365 |  |
| 4378603 | D288683 | 4802236 | D315907 | 5163159 | 5321847 |  |
| 4390963 | 4654655 | 4809356 | 5008925 | 5164652 | D348880 |  |
| D269873 | D289156 | 4811377 | D316417 | 5166596 | 5349588 |  |
| 4389265 | 4662691 | 4811404 | D316859 | 5175759 | 5359696 |  |
| 4400584 | 4667333 | 4827226 | 5017856 | 5175874 | 5361400 |  |
|  |  |  |  |  | $71$ |  |
|  |  |  |  |  |  |  |



## DISPLAY MESSAGE GLOSSARY

| Message | Description | $\begin{gathered} \text { See } \\ \text { Page(s) } \end{gathered}$ |
| :---: | :---: | :---: |
| NN' | Memory scrolling is active (where NN is the memory number) | 40 |
| 0 | Shows a pause stored in memory | 61 |
| Alpha or STO | Prompts you to press the "alpha" keys or (STO) | 36 |
| Auto Ansr | Automatic answer | 31 |
| Auto Lock | Automatic lock | 46 |
| A1 | Two-system operation; non-wireline system is active, using phone number 1 | 55 |
| A2 | Two-system operation; non-wireline system is active, using phone number 2 | 55 |
| B1 | Two-system operation; wireline system is active, using phone number 1 | 55 |
| B2 | Two-system operation; wireline system is active, using phone number 2 | 55 |
| One Min Timr | Call-time reminder tone | 26 |
| Busy | Master clear in progress | 65 |
| Call | Call now being, or was previously, received | 16, 17 |
| Change? | Memory prompt to caution before overwriting previously stored information | 36, 42 |
| Clear? | Memory prompt to caution before clearing a memory entry | 43 |
| Emergcy | Emergency call in progress (using 1 ) | 19,33 |


| Message | Description | See Page(s) |
| :---: | :---: | :---: |
| NoNames Stored | No names are stored in memory | 40 |
| Emergcy Call | Emergency dialing display setting (appears with On or Off) | 33 |
| Full | Memory is full or the requested memory block is unavailable | 36, 42 |
| Home | Home system-type selected | 56 |
| Indiv Timer | Automatic timer function | 53 |
| Keypad Tone | Keypad tone setting | 30 |
| Level (1-6) | Service restriction level | 48 |
| LocCode | Appears before lock code | 45 |
| Lock? | Appears during manual lock procedure | 45 |
| Locked | Phone is locked | 45 |
| Low Bat | Battery power is low | 11 |
| MultKey Ansr | Multiple key answer | 32 |
| Mute | Microphone is turned off | 18 |
| Number Pref | Number display preference function | 33 |
| on | Appears when display is clear (if signal strength meter is off) | 26 |
| PIN Active or Inactiv | PIN dialing function is on or off | 60 |
| Redial | Automatic redial in progress | 20 |
| Ring Off | Ringer alert off (appears with Vib Off) | 29 |
| Ring On | Ringer alert on (appears with Vib On) | 29 |


| Message | Description | See <br> Page(s) |
| :---: | :--- | :---: |
| Ring Only | Ring only alert type | 29 |
| Scan A | Non-wireline A system-type <br> selected | 56 |
| Scan AB | A then B scan system-type selected | 56 |
| Scan B | Wireline B scan system-type <br> selected | 56 |
| Scan BA | B then A scan system-type selected | 56 |
| Call Rcv | Call screening function | 34 |
| Pref'd SIDs | (System ID) Specific cellular ID <br> required (system-type selected) | 56 |
| Signal Mtr | Signal strength meter | 14,26 |
| Std Setting | Appears during master reset proce- <br> dure | 56 |
| Std AB | Standard non-wireline system-type <br> selected | 56 |
| Std BA | Standard wireline system-type <br> selected | 56 |
| Turbo Dial | One-touch dialing | 32 |
| Scrpad Tone | Scratchpad tone | 27 |
| Vib Off | Vibration alert off (appears with <br> Ring Off) | 29 |
| Vib On | Vibration alert on (appears with <br> Ring On) | 29 |
| Vibrate Only | Vibration only alert type | 29 |
|  |  |  |



## Limited One-Year Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for one (1) year from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.
Some states do not allow the limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.
In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.
This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.
This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.
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We Service What We Sell

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